

Division of Solid & Hazardous Waste  
401 East State Street  
P.O. Box 414  
Trenton, New Jersey 08625-0414  
Phone # 609-292-9880  
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Hazardous Waste Facility Permit

Under the provisions of N.J.S.A. 13:1E-et seq. known as the Solid waste Management Act, this permit is hereby issued to:

Department of the Army  
U.S. Army Armament Research,  
Development and Engineering Center  
Picatinny Arsenal, New Jersey 07806-5000

For the Purpose of Operating a:	Hazardous Waste Storage Facility
County:	Federal Enclave Located in Morris County
Under Facility Permit No.:	1409E1HP07
USEPA ID No.:	NJ3 210 020 704

This permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection.

This permit shall not prejudice any claim the State may have to Riparian land nor does it permit the registrant to fill or alter, or allow to be filled or altered, in any way, lands that are deemed to be riparian, Wetlands, stream encroachment or flood plains, or within the Coastal Area Facility Review Act (CAFRA) zone or allow the discharge of pollutants to waters of this State without first acquiring the necessary grants, permits, or approvals from the Department of Environmental Protection or the U.S. Environmental protection Agency.

March 12, 1996

Issuance Date

April 28, 1997

Reissuance Date

May 28, 1997

Effective Date

September 29, 2000

Modification Date

March 12, 2006

Expiration Date

Signed by Thomas Sherman, Assistant Director

Thomas Sherman

Assistant Director

Division of Solid and Hazardous Waste

Table of Contents

<u>Item</u>	<u>Page</u>
Scope of Permit	3
Description of Hazardous Waste Activities	4
Section I – General Conditions Applicable to all Permits	
1. Duty to Comply	5
2. Duty to Reapply	5
3. Need to Halt or Reduce Activity Not a Defense	5
4. Need to Mitigate	5
5. Proper Operation and Maintenance	5
6. Permit Actions	6
7. Property Rights	6
8. Duty to Provide Information	6
9. Inspection and Entry	6
10. Monitoring and Records	6
11. Signatory Requirement	7
12. Reporting Requirements	7
Section II – General Conditions applicable to the Department of the Army, U.S. Armament Research, Development and Engineering Center	
1. Permit Modification or Revocation and Reissuance	11
2. Personnel Training	11
3. Preparedness and Prevention	11
4. Contingency Plan	12
5. Security	14
6. Termination of a Permit	15
7. Operating Record	15
8. Permit Limitations	15
9. Compliance with Other State Regulations and Statutes	16
10. Submission of Documents Required by Permit Compliance Conditions	16
11. Referenced Permit Application Documents	16
Section III – Specific Conditions Applicable to the Department of the Army, U.S. Army Armament Research, Development and Engineering Center	
1. Authorized Activities	20
2. Authorized Wastes	22
3. Waste Analysis and Quality Assurance Requirements	25
4. Inspection Requirements	26
5. Closure of Hazardous Waste Management Units	27
6. Construction/Installation Requirements	29

### Scope of Permit

The hazardous waste rules at N.J.A.C. 7:26G were adopted by the New Jersey Department of Environmental Protection on October 21, 1996. By this adoption, the Department “incorporated by reference” (with limited exception) the July 1, 1993, version of the Federal hazardous waste regulations found at Parts 124, 260-266, 268 and 270, Title 40 of the Code of Federal Regulations (C.F.R.). Those provisions of the Federal regulations which were not incorporated by reference are listed in the State regulatory adoption. Additional changes to the New Jersey hazardous waste rules will be necessary to address Federal regulations adopted subsequent to July 1, 1993. The Department anticipates addressing these subsequent Federal regulations in a regulatory adoption sometime in 1997. At that time, the Department will adopt amendments to N.J.A.C. 7:26G to incorporate by reference those changes to the Federal regulations that have been made since July 1, 1993, and a prospective incorporation by reference which will incorporate all future amendments and supplements to the Federal regulations automatically. Within 180 days of the effective date of these amendments to N.J.A.C. 7:26G, the Department will initiate a modification of this permit to incorporate such provisions as are made necessary by the newly adopted rules.

The conditions of this permit are based on the New Jersey hazardous waste regulations at N.J.A.C. 7:26G and on the permit application submitted by the permittee. In order to eliminate confusion, and to clearly describe the precise obligations which are imposed upon the permittee, only the specific Federal regulatory citations as of July 1, 1993, are listed in the conditions of this permit. For the applicable State regulatory citations, refer to N.J.A.C. 7:26G.

This permit, along with the referenced permit application documents herein specified, shall constitute the sole Hazardous Waste Facility Permit for the construction and operation of a hazardous waste storage facility by the Department of the Army, U.S. Army Armament Research, Development and Engineering Center located in Morris County, New Jersey. Any Registration, Approval or Permit previously issued by the Office of Permitting or its predecessor agencies is hereby superseded. The permittee need not comply with the conditions of this permit to extent and for the duration such non-compliance is authorized by an emergency permit (40 C.F.R. § 270.61).

Section I of this permit contains general conditions applicable to all hazardous waste facilities. Section II of this permit contains general conditions applicable to hazardous waste management activities. Section III of this permit contains specific conditions applicable to the Department of the Army, U.S. Army Armament Research, Development and Engineering Center’s facility.

### Description of Hazardous Waste Activities

Issuance of the hazardous waste facility permit will authorize the Department of the Army, U.S. Army Armament Research, Development and Engineering Center (Picatinny Arsenal) to continue to operate a hazardous waste storage facility. Picatinny Arsenal is a major subordinate center of the U.S. Army Material Command. Picatinny Arsenal has responsibility for the research and development of numerous armament items, including pilot-level production of explosives, propellants, and metal parts.

The research, production, and testing activities at Picatinny Arsenal result in the generation of hazardous waste that exhibits one or more of the characteristics of ignitability, reactivity, corrosivity or toxicity or are listed at 40 C.F.R. Picatinny Arsenal's hazardous waste management units consist of three (3) indoor container storage areas. The permit restricts the permittee to the storage of on-site generated hazardous waste only. The permittee cannot accept hazardous waste from any other generator.

### Modification 09/29/00

In response to the permittee's request for a Class 2 permit modification, the Department has modified certain conditions of this permit. The permittee's February 22, 2000, subsequently revised May 9, 2000, application for a Class 2 permit modification and engineering designs has been added to Condition 11(a), Section II, Referenced Permit Application Documents. Section II, Condition 4, Contingency Plan has been modified by changing the area code of the plan's emergency telephone numbers from 201 to 973. Section III, Condition 1, Authorized Activities has been modified by adding a proposed hazardous waste storage locker at Building 3100, Bay 6 with a container storage capacity of 1,980 gallons. Section III, Condition 1 has also been modified to remove authorization for use of the Building 3114 hazardous waste storage area because the area has been closed. Section III, Condition 2, Authorized Wastes has been modified to change the description of listed hazardous waste F024 to be consistent with Federal regulations. Section III, Condition 6, Construction/Installation has been added for construction requirements applicable to the proposed storage locker in Building 3100. Modifications were also made to correct typographical errors and to revise Department addresses and phone numbers.

## Section I

### General Conditions Applicable to All Permits (40 C.F.R. § 270.30)

#### 1. Duty to Comply

The permittee must comply with all conditions of this permit, except that the permittee need not comply with the conditions of this permit to extent and for the duration such noncompliance is authorized in an emergency permit. (See 40 C.F.R. § 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the appropriate Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

#### 2. Duty to Reapply

- (a) If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.
- (b) A complete application for a new permit shall be submitted at least one hundred eighty (180) days prior to the expiration date of this permit.

#### 3. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### 4. Need to Mitigate

In the event of noncompliance with the permit, the permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment.

#### 5. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar

systems only when necessary to achieve compliance with the conditions of the permit.

6. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

7. Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege.

8. Duty to Provide Information

The permittee shall furnish to the Department, within a reasonable time, any relevant information which the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The permittee shall also furnish to the Department, upon request, copies of records required to be kept by this permit.

9. Inspection and Entry

The permittee shall allow an authorized representative of the Department upon the presentation of credentials and other documents as may be required by law to:

- (a) Enter at reasonable times upon the permittee's premises where a required facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated under this permit; and
- (d) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location.

10. Monitoring and Records

- (a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

- (b) The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by 40 C.F.R. § 264.73(b)(9) of this chapter, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report, certification, or application. This period may be extended by request of the Department at any time. The permittee shall maintain records from all ground-water monitoring wells and associated ground-water surface elevations, for the active life of the facility, and for disposal facilities for the post-closure care as well.
- (c) Records for monitoring information shall include:
  - 1. The date, exact place, and time of sampling or measurements;
  - 2. The individual(s) who performed the sampling or measurements;
  - 3. The date(s) analyses were performed;
  - 4. The individual(s) who performed the analyses;
  - 5. The analytical techniques or methods used; and
  - 6. The results of such analyses.

11. Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified. (See 40 C.F.R. § 270.11).

12. Reporting Requirements

(a) Planned Changes

The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility.

(b) Anticipated Noncompliance

- 1. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. For a new facility, the permittee may not treat, store, or dispose of hazardous waste; and for a facility being modified; the permittee may not treat, store, or dispose of hazardous waste in the modified portion of the facility except as provided in 40 C.F.R. § 270.42, until:

- (i) The permittee has submitted to the Department by certified mail or hand delivery a letter signed by the permittee and a registered professional engineer stating that the facility has been constructed or modified in compliance with the permit; and
- (ii) (A) The Department has inspected the modified or newly constructed facility and finds it is in compliance with the conditions of the permit; or  
(B) If, within 15 days of the date of submission of the letter in paragraph 12(b)1i of this section, the permittee has not received notice from the Department of his or her intent to inspect, prior inspection is waived and the permittee may commence treatment, storage, or disposal of hazardous waste.

(c) Transfers

This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under RCRA. (See 40 C.F.R. § 270.40).

(d) Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

(e) Compliance Schedule

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(f) Twenty-Four Hour Reporting

1. The permittee shall report any noncompliance which may endanger health or the environment orally within 24 hours from the time the permittee becomes aware of the circumstances, including:
  - (i) Information concerning the release of any hazardous waste that may cause an endangerment to public drinking water supplies.



- (ii) Any information of a release or discharge of hazardous waste or of a fire or explosion from the HWM facility, which could threaten the environment or human health outside the facility.
- 2. The description of the occurrence and its cause shall include:
  - (i) Name, address, and telephone number of the owner or operator;
  - (ii) Name, address, and telephone number of the facility;
  - (iii) Date, time, and type of incident;
  - (iv) Name and quantity of material(s) involved;
  - (v) The extent of injuries, if any;
  - (vi) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and
  - (vii) Estimated quantity and disposition of recovered material that resulted from the incident.
- 3. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Department may waive the five day written notice requirement in favor of a written report within fifteen days.

Modified 09/29/00

- 4. Oral Notification shall be provided to the NJDEP Hotline at 1-877-WARNDEP. Written notification shall be provided to the Bureau of Hazardous Waste and Transfer Facilities and the Bureau of Hazardous Waste Compliance and Enforcement at the addresses provided in Condition 10 of Section II of this permit.

(g) Biennial Report

A biennial report must be submitted covering facility activities during odd numbered calendar years. (See 40 C.F.R. 264.75.)

(h) Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraphs (d), (e) and (f) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (f) of this section.

(i) Other Information

Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

End of Section I

## Section II

### General Conditions Applicable to Department of the Army, U.S. Army Armament Research, Development and Engineering Center Facility Permit

1. Permit Modification or Revocation and Reissuance

Cause for, and procedures of, modification, or revocation and reissuance of this permit shall be as provided under 40 C.F.R. § 270.41.

2. Personnel Training (40 C.F.R. § 264.16)

- (a) Facility personnel shall successfully complete a program of classroom instruction or on-the-job training that teaches them to perform their duties in a way that insures the facility's compliance with the requirements of 40 C.F.R. § 264.16, as stated in the facility's Part B permit application, and as referenced in Condition 11(b) of Section II of this permit. New employees shall be trained within six (6) months of the date of employment.
- (b) The training program shall be maintained with records and documentation describing the type and amount of both introductory and continuing training that has been and will be given to each person engaged in hazardous waste management at the facility.
- (c) The permittee shall keep the training records on current personnel until closure of the facility; training records on former employees shall be kept for at least three (3) years from the date the employee last worked at the facility. Personnel training records may accompany personnel transferred within the same company.

3. Preparedness and Prevention (40 C.F.R. § 264.30 through § 264.37)

The facility shall be designed, constructed, maintained and operated to minimize the possibility of fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to the air, soil, surface water or groundwater which could threaten human health or the environment.

- (a) The facility shall be equipped with emergency equipment, including but not limited to:
  - 1. An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel;
  - 2. A device, such as a telephone (immediately available at the scene of operations) or a hand-held two-way radio, capable of summoning emergency assistance from local police departments, fire departments, or State or local emergency response teams;

3. Portable fire extinguisher, fire control equipment, spill control equipment, and decontamination equipment; and
  4. Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems.
- (b) All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, shall be tested and maintained as necessary to assure its proper operation in time of emergency.
4. Contingency Plan (40 C.F.R. § 264.50 through § 264.56)
- (a) The provisions of the Contingency Plan included in the Part B permit application plus all amendments, revisions and modifications thereof subsequently submitted for review and accepted by the Department, and as referenced in Condition 11(b) of Section II of this permit, shall be carried out immediately whenever there is a fire, explosion or release of hazardous waste constituents which could threaten health or the environment.
- (b) When an emergency coordinator determines that the facility has had a discharge, fire, or explosion which could threaten human health or the environment outside the facility, the emergency coordinator shall immediately notify the local Fire Department and local Police Department if an assessment indicates that evacuation of local areas may be advisable. The emergency coordinator shall be available to help officials decide if local areas should be evacuated. The telephone numbers are:

Modified 09/29/00

Police

- Wharton Borough – 18 West Central Avenue, Wharton, NJ (973) 336-0557
- Rockaway Township – 65 Mt. Hope Road, Rockaway, NJ (973) 625-4000
- Rockaway Borough – 21-25 Union, Rockaway, NJ (973) 989-7000
- Dover – 37 North Sussex Street, Dover, NJ (973) 366-0302
- Jefferson Township, Weldon Road, Jefferson Twp., NJ (973) 697-1300

Fire

- Rockaway Township Fire Department (973) 625-4000
1. Marcella Fire Co. – Upper Hibernia Road, Marcella, NJ
  2. Hibernia Fire Co. – Green Pond Road, Hibernia, NJ
  3. Mount Hope Fire Co. – Mt. Hope Road, Mt. Hope, NJ

- Jefferson Township (973) 697-1300

1. Cozy Lake Road, Oak Ridge, NJ
2. New York Avenue, Jefferson, NJ

- Dover (973) 366-0301

37 North Sussex Street, Dover NJ

- New Jersey Forest Service  
State Highway No. 23  
Franklin, New Jersey (973) 827-6100

- New Jersey National Guard Heliport  
Picatinny Arsenal, New Jersey (973) 724-4551

- (c) 1. If the facility has a discharge, fire, or explosion which could threaten human health or the environment, the following shall be notified immediately:

Modified 09/29/00

New Jersey Department of Environmental Protection  
Communication Center/Trenton Dispatch  
Bureau of Communication and Support Services  
Trenton, NJ 08625  
Telephone 1-877-WARNDEP

2. Additionally, if the emergency coordinator determines that the facility has had a discharge, fire, or explosion which could threaten human health, or the environment, outside the facility, the emergency coordinator shall immediately notify:

National Response Center  
2100 Second Street, SW  
Washington, D.C. 20593  
Telephone 1-800-424-8802 (24 Hours)

- (d) If the emergency coordinator determines that the facility has had a discharge, fire, or explosion which would threaten human health or the environment, the emergency coordinator shall immediately notify the agencies listed in Condition 4(c). When notifying these agencies, the coordinator shall report the type of substance and the estimated quantity discharged, if known; the location of the discharge; actions the person reporting the discharge proposes to take to contain, clean up and remove the substance if any and any other information concerning the discharge which the Department may request at the time of notification.

- (e) The owner or operator shall note in the operating record the time, date, and details of any incident that requires implementing the contingency plan. Within 15 days after the incident, the owner or operator shall submit a written report on the incident to the Department. The report shall include, but not be limited to:
  - 1. Name, address, and telephone number of the owner or operator;
  - 2. Name, address, and telephone number of the facility;
  - 3. Date, time, and type of incident;
  - 4. Name and quantity of material(s) involved;
  - 5. The extent of injuries, if any;
  - 6. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and
  - 7. An estimated quantity and disposition of recovered material that resulted from the incident.

5. Security (40 C.F.R. § 264.14)

- (a) The permittee must maintain the security procedures as described in the facility's Part B permit application plus all amendments, revisions and modifications thereof subsequently submitted for review and accepted by the Department, and as referenced in Condition 11(a) of Section II of this permit.
- (b) The permittee shall prevent the unknowing entry, and minimize the possibility for the unauthorized entry, of persons or livestock onto the active portion of the facility.
  - 1. A facility shall have:
    - (i) A 24-hour surveillance system which continuously monitors and controls entry onto the active portion of the facility; or
    - (ii) An artificial or natural barrier, which completely surrounds the active portion of the facility; and a means to control entry, at all times, through the gates or other entrances to the active portion of the facility.

2. The requirements of paragraph (b)1 are satisfied if the hazardous waste storage, treatment or disposal site is located in a facility which itself has a surveillance system, or barrier and means to control entry, which complies with the requirements of subparagraph (b)1i or (b)1ii.
3. The owner or operator shall post a sign with the legend, “Danger – Unauthorized Personnel Keep Out”, at each entrance to the active portion of a facility, and at other locations, in sufficient numbers to be seen from any approach to this active portion. The legend shall be written in English and in any other language prevalent in the area surrounding the facility and must be legible from a distance of at least twenty five (25) feet. Existing signs with a legend other than “Danger Unauthorized Personnel Keep Out” may be used if the legend on the sign indicates that only authorized personnel are allowed to enter the active portion, and that entry onto the active portion can be dangerous.

6. Termination of a Permit (40 C.F.R. § 270.43)

The following are causes for terminating a permit during its term or for denying a permit renewal application:

- (a) Noncompliance with any condition of this permit; or
- (b) The permittee’s failure in the application or during the permit issuance process to disclose fully all relevant facts or the permittee’s misrepresentation of any relevant facts at any time; or
- (c) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination.

7. Operating Record (40 C.F.R. § 264.73)

The permittee shall keep a written operating record at the facility in which the information required under 40 C.F.R. § 264.73(b) shall be recorded. The information shall be recorded as it becomes available and maintained in the operating record until closure of the facility.

8. Permit Limitations (40 C.F.R. § 270.4(c))

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights or any infringement of applicable Federal, State or local laws or regulations.

9. Compliance with Other State Regulations and Statutes

The permittee shall comply with all regulations of the Department of Environmental Protection and other State Statutes applicable to the facility. Regulations are effective upon publication in the New Jersey Register or as otherwise indicated in the Notice of Adoption in the New Jersey Register.

10. Submission of Documents Required by Permit Conditions

The permittee shall submit all permit compliance documents required by this permit to the following:

Modified 09/29/00

- (a) New Jersey Department of Environmental Protection  
Division of Solid and Hazardous Waste  
Bureau of Hazardous Waste and Transfer Facilities  
P.O. Box 414  
Trenton, New Jersey 08625-0414

Modified 09/29/00

- (b) New Jersey Department of Environmental Protection  
Bureau of Hazardous Waste Compliance and Enforcement  
Northern Region  
1259 Route 46 East, Building 2  
Parsippany, New Jersey 07054-4191

11. Referenced Permit Application Documents

- (a) The permittee shall operate the facility, and construct or install associated appurtenances thereto, in accordance with the regulations contained in 40 C.F.R. Parts 260 through 270, the conditions of this permit, and the following permit application documents:
  - 1. U.S. Army Armament Research, Development and Engineering Center (ARDEC), Application for Hazardous Waste Facility Permit dated November 7, 1988, and all subsequent revisions signed by Joseph Raffiani, Jr., Brigadier General, U.S.A. Commanding.
  - 2. U.S. Army Armament Research, Development and Engineering Center (ARDEC), Part A and B permit application for a hazardous waste facility, dated August 23, 1990, and signed by William R. Holmes, Colonel, U.S. Army Commanding.
  - 3. Request for minor modification of hazardous waste storage facility permit dated May 9, 1991, signed by Thomas J. Solecki, Chief, Environmental Affairs Office, U.S. Army ARDEC.



4. Request for minor modification of hazardous waste storage facility permit dated October 5, 1993, signed by Paul E. Reed, Acting Chief, Hazardous Materials Branch U.S. Army ARDEC and additional information dated December 10, 1993, and December 16, 1993.
5. U.S. Army Armament Research, Development and Engineering Center, permit renewal application for a hazardous waste storage facility, dated September 7, 1995, signed by Fred Haber, Chief Environmental Compliance Division.
6. The following Engineering drawings submitted:
  - (a) Modifications to building 1094 (File No. 7522-12085, SH.1) signed and sealed by Richard W. Greene, P.E., dated September 29, 1988.
  - (b) Modifications to building 1094, floor plans and views (File No. 7522-12086), SH.2) signed and sealed by Richard W. Greene, P.E., dated September 29, 1988.
  - (c) Modifications to building 1094, details (File No. 7522-12087, Sh.3) signed and sealed by Richard W. Greene, P.E., dated September 29, 1988.
  - (d) Modifications to building 3100 signed and sealed by Richard W. Greene, P.E., dated September 29, 1988.
  - (e) Modifications to building 3114, (File No. 7522-12088, site plan, SH.1) signed and sealed by Richard W. Greene, P.E., dated September 29, 1988.
  - (f) Modifications to building 3114, (File No. 7522-12089, SH.2) signed and sealed by Richard W. Greene, P.E., dated September 29, 1988.
  - (g) Modifications to building 3114, (File No. 7522-12090) signed and sealed by Richard W. Greene, P.E., dated September 29, 1998.
  - (h) Modifications to Building 3100 Floor Plan, Drawing No. G-1, signed and sealed by Steven J. Roland, P.E., dated November 4, 1999.
  - (i) Elevations, Drawing No. DA1393-1A, Rev. A, signed and sealed Ned C. Myers, P.E., dated October 20, 1998.

Added 09/29/00

Added 09/29/00

Added 09/29/00

- (j) FS Series Structural Drawing, Drawing No. STD-FS1A, Sheet 1 of 2, Rev. A, signed and sealed by Ned C. Myers, P.E., dated April 13, 1997.

Added 09/29/00

- (k) FS Series Structural Details, Drawing No. STD-FS2A, Sheet 2 of 2, Rev. A, signed and sealed by Ned C. Myers, P.E., dated April 13, 1997.

Added 09/29/00

- 7. Request for Class 2 permit modification of hazardous waste storage facility permit dated February 22, 2000, signed by Thomas Solecki, Chief, Environmental Affairs Division, U.S. Army ARDEC, and additional information dated May 9, 2000.

In case of conflict, the applicable hazardous waste management regulations contained in 40 C.F.R. shall have precedence over the conditions of this permit, and the conditions of this permit shall have precedence over the Part B permit application documents listed above.

- (b) One complete set of the permit application documents listed in Condition 11(a) above, this Hazardous Waste Facility Permit, and all records, reports and plans as may be required pursuant to this permit shall be kept on-site and shall be available for inspection by authorized representatives of the Department upon presentation of credentials. The records, reports and plans required pursuant to this permit include the following:
  - 1. The description of the personnel training program and the records required by Condition 2 of Section II of this permit and 40 C.F.R. § 264.16.

Modified 09/29/00

- 2. The Contingency Plan required by Condition 4 of Section II of this permit and 40 C.F.R. § 264.50, and specifically the plan prepared by U.S. Army Armament Research, Development and Engineering Center dated November 7, 1988, subsequently revised September 7, 1995 and May 9, 2000.
- 3. The written Operating Record required by Condition 7 of Section II of this permit and 40 C.F.R. § 264.73.
- 4. The Waste Analysis Plan outlined in Condition 3 of Section III of this permit and as required by 40 C.F.R. § 264.13, and specifically the plan prepared by U.S. Army Armament Research, Development and Engineering Center dated November 7, 1988, subsequently revised October 5, 1993.

5. The Inspection schedule required by 40 C.F.R. § 264.15(b) and records required by Condition 4 of Section III of this permit.

Modified 09/29/00

6. The Closure Plan required by Condition 5 of Section III of this permit and 40 C.F.R. § 264.112 and specifically the plan prepared by U.S. Army Armament Research, Development and Engineering Center dated November 7, 1998, subsequently revised May 9, 2000.

End of Section II

Section III

Specific Facility Conditions Applicable to the Department of the Army, U.S. Armament  
Research, Development and Engineering Center

1. Authorized Activities

Modified 09/29/00

(a) Container Storage

1. The permittee is authorized to store on-site generated hazardous waste in containers in the existing container storage areas listed below as detailed on the engineering drawings cited in Condition 11(a) of Section II of this permit and as follows:

<u>Building Location</u>	<u>Maximum Storage Volume (Gallons)</u>	<u>Maximum Container Volume (Gallons)</u>
1094	Two Thousand Eight Hundred and Sixty Two (2,862)	Two Hundred Fifty (250)
3100	Bay 1 – One Thousand Nine Hundred and Eighty (1,980)	Two Hundred Fifty (250)
	Bay 2 – Two Thousand Four Hundred and Twenty (2,420)	Two Hundred Fifty (250)
	Bay 3 – Eight Thousand Five Hundred and Eighty (8,580)	Two Hundred Fifty (250)
	Bay 4 – Three Thousand Nine Hundred and Sixty (3,960)	Two Hundred Fifty (250)
	Bay 5 – Seven Thousand Seven Hundred and Eighty (7,780)	Two Hundred Fifty (250)

Added 09/29/00

2. Upon completion of construction and Departmental approval in accordance with Condition 6 of Section III of this permit, the permittee shall be authorized to store on-site generated hazardous waste in containers in the proposed hazardous waste storage locker listed below in accordance with the Part B permit application documents and engineering designs referenced at Condition 11(a) of Section III of this permit and as follows:

<u>Building Location</u>	<u>Maximum Storage Volume (Gallons)</u>	<u>Maximum Container Volume (Gallons)</u>
3100	Bay 6 – One Thousand Nine Hundred and Eighty (1,980)	Two Hundred Fifty (250)

- (b) A secondary containment system, constructed of reinforced concrete shall be maintained free of cracks or gaps and of adequate capacity and be sufficiently impervious to contain leaks, spills and accumulated rainfall until the collected material is detected and removed. The base shall have adequate structural integrity to withstand the maximum stress applied to the base due to activities or structures placed in the containment area. The secondary containment system shall be maintained and operated to efficiently drain and remove liquids from leaks, spills and precipitation.
- (c) Spilled or leaked waste shall be removed from the secondary containment system in a timely manner, to prevent blockage or overflow of the collection system.
- (d) The containers shall be managed in compliance with all provisions of 40 C.F.R. § 264.173.
- (e) The permittee shall not place a waste which is incompatible with waste already in a container, or incompatible with a material of construction of a container, in that container. The permittee shall not place a hazardous waste in an unwashed container which previously held an incompatible waste or material. The permittee shall evaluate each waste, prior to its addition to any container, to ensure compliance with 40 C.F.R. § 264.17(b).
- (f) If a container holding hazardous waste is not in good condition (e.g., severe rusting, apparent structural defects) or if it begins to leak, the permittee must transfer the hazardous waste from this container to a

container that is in good condition or manage the waste in some other way that complies with the requirements of 40 C.F.R. § 264.171.

- (g) The permittee shall maintain a minimum aisle space of eighteen (18) inches between double rows of containers. Containers smaller than one hundred and ten (110) gallons shall be staked no higher than the equivalent of two (2) one hundred and ten (110) gallon containers. One hundred and ten (110) gallon containers shall be stacked no greater than two (2) high. Containers greater than one hundred and ten (110) gallons shall be stacked no greater than one (1) high.

Added 09/29/00

- (h) The maximum container volume for any container holding volatile organics at a concentration greater than 500 ppm by weight shall be less than one hundred and twenty one (121) gallons.

## 2. Authorized Wastes

- (a) The permittee is authorized to store the following on-site generated hazardous waste types in containers, prior to transfer to an authorized off-site treatment, storage or disposal facility:

### Hazardous

#### Waste Codes    Description

F001            The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, and chlorinated fluorocarbons; all spent solvent mixtures/blends used in degreasing containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004 and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures

F002            The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, 0-dichlorobenzene, chlorofluoromethane, and 1,1,2-trichloroethane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those listed in F001, F004, or F005; and the still bottoms from the recovery of these spent solvents and spent solvent mixtures

F003            The following spent non-halogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent

mixtures/blends containing, before use, a total of 10 percent or more (by volume) or one or more of the non-halogenated solvents listed above or those solvents listed in F001, F002, F004 and F005; and the still bottoms from the recovery of these spent solvents and spent solvent mixtures

- F004      The following spent non-halogenated solvents: cresols and cresylic acid, and nitrobenzene; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of the above non-halogenated solvents or those solvents listed in F001, F002, and F005; and all still bottoms from the recovery of these spent solvent and spent solvent mixtures
- F005      The following spent non-halogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the non-halogenated solvents listed above or those solvents listed in F001, F002 or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
- F006      Wastewater treatment sludges from electroplating operations except from the following processes: (1) sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum
- F007      Spent cyanide plating bath solutions from electroplating operations
- F008      Plating bath sludges from the bottom of plating baths from electroplating operations where cyanides are used in the process
- F009      Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process
- F010      Quenching bath sludge from oil baths from metal heat treating operations where cyanides are used in the process
- F011      Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations
- F012      Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process

F019	Wastewater treatment sludges from the chemical conversion coating of aluminum
F020	Waste (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol, or of intermediates used to produce their pesticide derivatives
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce its derivatives
F022	Waste (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzenes under alkaline conditions
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols
Modified 09/29/00 F024	<p>Process wastes, including but not limited to distillation residues, heavy ends, tars, and reactor clean-out wastes, from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.</p> <p>(This listing does not include wastewaters, wastewater treatment sludges, spent catalysts, and wastes listed in 40 C.F.R. § 261.31 or § 261.32)</p>
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols



F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA Hazardous Waste Nos. F020, F021, F022, F023, F026 and F027
K044	Wastewater treatment sludges from the manufacturing and processing of explosives
K045	Spent carbon from the treatment of wastewater containing explosives
K046	Wastewater treatment sludges from the manufacturing, formulation and loading of lead-based initiating compounds
K047	Pink/red water from TNT operations

All "D", "P" and "U" hazardous wastes listed in 40 C.F.R. ?? 261.21 through 24 and 261.33.

The permittee may store non-hazardous wastes which were previously classified as hazardous wastes (X721 through X726, X750 through X754, C387), non-hazardous dry industrial waste (ID 27) and bulk liquid and semi-liquid non-hazardous waste (ID 72). The combined volume of non-hazardous waste in the permittee's authorized facility shall not exceed the capacity listed in Condition 1(a) of Section III of this permit.

3. Waste Analysis and Quality Assurance Requirements

- (a) The permittee shall adhere to the provisions of the waste analysis plan cited in Condition 11(b)4 of Section II of this permit, and any subsequent revisions approved by the Department's Office of Permitting.
- (b) Each hazardous waste generated at this location shall be fully identified and classified in accordance with 40 C.F.R. ? 261.3. At a minimum, the permittee shall develop all of the information which must be known to store the waste in accordance with the provisions of this permit, as well as to treat or dispose of the waste at an authorized facility. If any hazardous waste cannot be fully identified and classified from the company knowledge of the process through which the waste was generated, then the permittee shall have proper samples of the waste analyzed in accordance with the permittee's waste analysis plan cited in Condition 11(b)4 of section II of this permit and any Quality Assurance/Quality Control methodology established by the Department.
- (c) Sampling methods shall be in accordance with the procedures as outlined in the waste analysis plan cited in Condition 11(b)4 of Section II of this permit,

and shall employ equipment as prescribed in the latest edition of EPA Manual SW 846.

- (d) The permittee shall maintain in the written Operating Record required by Condition 7 of Section II of this permit, as per 40 C.F.R. ? 264.73(b)(3), records and results of all waste analyses performed. Such records and results shall be entered into the written Operating Record as they become available and shall be maintained until closure of the facility.
- (e) The permittee shall maintain the following information as per 40 C.F.R. ? 270.30(j)(3) in the written Operating Record:
  - 1. The date, exact place, and time of sampling or measurements;
  - 2. The individual(s) who performed the sampling or measurements;
  - 3. The date(s) the analyses were performed;
  - 4. The individual(s) who performed the analysis;
  - 5. The analytical techniques or methods used; and
  - 6. The results of the analysis.
- (f) No changes shall be made to the waste analysis plan without the prior approval of the Division of Solid and Hazardous Waste.

4. Inspection Requirements (40 C.F.R. ? 264.15, ? 264.174 and ? 270.14(b)(5))

The permittee shall inspect the areas and items listed below for deterioration or malfunction which may cause discharge of hazardous waste or a threat to human health or the environment. The results of the inspections shall be maintained for at least three (3) years from the date of inspection at the Department of the Army, U.S. Army Armament Research, Development and Engineering Center's facility. The permittee shall conduct inspections as outlined below:

- (a) The Container storage area shall be inspected at least weekly as follows:
  - 1. All containers sealed
  - 2. Any leaking containers or spills
  - 3. Any deteriorating containers
  - 4. Any containers swollen or bulged
  - 5. Any containers concaved due to internal vacuum building up
  - 6. Any containers with corrosion
  - 7. All containers properly labeled, identified and stacked
  - 8. All containers compatible with waste stored in them

9. Indications of cracks or leaks in concrete floor, concrete sump, concrete curbs, or concrete vehicle ramps
  10. Aisle space access - minimum 18"
- (b) All container storage safety/emergency equipment shall be inspected as outlined in the Part B permit application referenced in Condition 11(a) of Section II of this permit.
  - (c) The permittee shall remedy any deterioration or malfunction of equipment or structures which the inspection reveals, on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately.
  - (d) A log shall be kept of the inspections and any remediation actions described under paragraphs (a) through (c) above to confirm adequate maintenance of the hazardous waste storage area and all appurtenances.
5. Closure of Hazardous Waste Management Units (40 C.F.R. ? 264.110)
- (a) At the time of final closure, the permittee shall close the Hazardous Waste Container Storage Units in the manner that is stated in 40 C.F.R. ? 264.110, and the closure plan referenced in Condition 11(b)6 of Section II of this permit, and the following:
    1. The permittee shall remove all hazardous waste from the hazardous waste container storage area(s) within ninety (90) days after the date the area(s) receive the final volume of waste and ship the waste to an authorized facility.
    2. The permittee shall decontaminate the container storage area(s) within ninety (90) days after the removal of hazardous waste by washing with detergent and water. The rinse water resulting from the decontamination shall be collected and disposed of properly.
    3. The permittee shall collect a final rinse water and wash water blank sample and test the samples for the parameters listed in the closure plan referenced at Condition 11(b)6 of Section II of this permit. Decontamination methods shall be repeated until the concentrations of the rinse water test parameters are equal to the amount present in the wash water blank. Rinse water and wash water blanks analysis results shall be submitted to the address listed in Condition 10(a) of Section II of this permit within sixty (60) days from the date of sampling.

4. The permittee shall retain any equipment or structures that require decontamination by the closure plan referenced at Condition 11(b)6 of Section II of this permit on-site until the facility has received a written determination from the Department that the decontamination levels specified by the closure plan have been achieved and the analytical results are acceptable to the Department, unless the permittee decides to dispose of the equipment or structures as hazardous waste.
  5. Within two hundred forty (240) days from the date of implementation of the closure plan, when closure is completed, the owner or operator shall submit to the Department, at the address listed in Condition 10(a) of Section II of this permit, by registered mail, a certification that the hazardous waste management unit or facility, as applicable, has been closed in accordance with the specifications in the approved closure plan and the conditions of this permit. The certification must be signed by the owner or operator and signed and sealed by an independent professional engineer registered in the State of New Jersey.
  6. The Department will review the submitted certification and rinse water analysis results and will conduct a closure certification inspection. If the rinse water analysis results are determined to be satisfactory and there is a satisfactory closure certification inspection, the closure certification will be accepted by the Department and the closure will be deemed complete.
- (b) The permittee shall keep a copy of the closure plan and all revisions to the plan at the facility until closure is completed.
  - (c) The permittee shall amend the closure plan any time changes in operating plans or facility design affect the closure plan or whenever there is a change in the expected year of closure of the facility. The permittee must comply with the requirement cited at 40 C.F.R. ? 264.112(c)(3) for amendment of closure plan.
  - (d) The permittee shall notify the Department at least forty five (45) days prior to the date the permittee expects to begin closure, except in cases where the facility's permit is terminated or if the facility is otherwise ordered by judicial decrees or compliance order to close. The date when the owner or operator "expects to begin closure" shall be within thirty (30) days after the date on which the owner or operator expects to receive the final volume of wastes.

Added 09/29/00

6. Construction/Installation Requirements

Upon issuance of this permit, the permittee shall comply with the procedures outlined below for the construction of the proposed hazardous waste storage locker at Building 3100, Bay 6:

- (a) The permittee shall construct the proposed hazardous waste storage locker as per the designs submitted with the February 22, 2000, Class 2 permit modification application referenced in Condition 11(a) of Section II of this permit. The permittee shall adhere to the construction schedule as per the aforementioned Class 2 permit modification application.
- (b) Within thirty (30) days after completion of the construction specified above, the permittee shall submit to the Department, by certified mail or hand delivery, a letter signed by the permittee and a New Jersey licensed professional engineer stating that facility has been constructed in accordance with the cited designs.
- (c) The Department shall inspect the facility to determine whether or not it is in compliance with the layout and specifications of the design plans set forth in the engineering plans and reports. The permittee shall not begin storage of any waste in the proposed hazardous waste storage locker until the Department has approved its construction. If within fifteen (15) days of the date of submission of a letter pursuant to the paragraph above, the permittee has not received from the Department notice of intent to inspect, prior inspection is waived and it is understood that the facility meets the design requirements and that the construction is approved. If the facility is not in compliance with the approved design, a schedule shall be submitted within thirty (30) days of the date of the Department's inspection outlining how the facility will be brought into compliance. The schedule shall be subject to the Department's approval.

End of Section III

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